Index

Abstract concepts, and developmental activities, 55
Academic achievement, and disadvantaged learners, 84, 86, 90
Academic self-concept, and failure in elementary school, 22, 33
Academic skills, for the handicapped, 110
Activities—
  for consumer education, 214
  that develop self-concept, 87, 91
  developmental, 52–58
  economic education in industrial arts, 198–206
  for guidance, 147
  for the handicapped, 106–108
  industrial arts and developmental tasks, 52–58
  industrial arts in elementary school, 32–37
  integrated in educating whole student, 263
  language arts in industrial arts, 186–187
  personalized skills for gifted, 73–74
Adaptive processes, in future education, 237
Adolescence, and developmental tasks, 42–43
Alphabet, development of, 175
Arithmetic, as concern in elementary school, 24, 30, 36
Asthma, as physical handicap, 104
Avocational skills, and disadvantaged learners, 94

"Basics," in elementary school, 24–25, 30, 36
Behavioral objectives, in industrial arts consumer education, 224
Bicultural learners, 83, 87, 91
Blindness, 105
Budgeting, and consumer education, 215

Career clusters, U.S.O.E., 115
Career education—
  as concern in elementary school, 25, 31, 37
  dangers related to self-realization in, 123
  goals of, 114
  industrial arts contributions to, 113–129
  limited to industrial arts, 115
  origins of, 114
  philosophical positions on, 118
  pitfalls in, 115
  review of literature on, 117–124
  and selected technology experiences, 125–128
Career exploration, learning that provides, 88, 95
Career goals, and disadvantaged learners, 84, 95

Career Search Inventory (CSI), 149–150
Change, educating people for, 227–229
Child prodigy, 68
Clusters, U.S.O.E. career, 115
Cognitive development, and industrial arts, 182
Communication—
  and developmental activities, 56
  as industrial arts content, 184
  learning that improves, 88, 92
Communication process, 173
Communication skills, for the handicapped, 109
Communication technology, in career education, 126–127
Congenital anomaly, as physical handicap, 104
Consumer education—
  basic objectives of, 213–214
  behavior change from industrial arts, 224
  case study in transportation, 221–222
  goals of industrial arts for, 217
  and industrial arts, 209–225
  and industrial arts experiences, 218–219
  review of literature on, 213–216
Consumer knowledge, and disadvantaged learners, 94
Contributions of industrial arts—
  to assist with developmental tasks, 52–58
  to career education, 124–128
  to consumer education, 216–224
  to developing language arts, 182–187
  to economic education, 198–206
  to educating whole student, 246–266
  to education of the disadvantaged, 89–96
  to education of the gifted, 73–77
  to education of the handicapped, 108–111
  to elementary education, 32–38
  to guidance, 146–156
  to reading improvement, 166–169
  to study of the future, 236–245
  to vocational education, 135–137
Cultural differences, and disadvantaged learners, 83, 87, 91
Culture—
  and developmental tasks, 42
  educating for future, 230

Deafness, 102
Decision-making activities, 52
Developmental activities, in industrial arts, 52–58
Developmental tasks—
  and basic industrial arts assumptions, 51
  characteristics of, 43–46
  defined, 41–43
  in educating whole student, 258
  and educational dimensions, 50–51
  in educating whole student, 263
  illustrated, industrial arts relationship, 57
  and industrial arts, 41–59
  review of literature on, 46–50
  summary of industrial arts contribution to, 58
Diabetes, as physical handicap, 105
Disabilities, learning, 101
Disadvantaged learners—
  identifying, 82
  industrial arts education of, 80–97
  review of literature on, 84–89

Economic concepts, outline of basic, 195–197
Economic education—
current findings, 191–192
and industrial arts, 190–208
review of literature on, 192–197
Economic principles, taught in industrial arts activities, 198–206
Economics—
conceptual diagram of, 193
key elements of understanding, 197
Education—
career and industrial arts, 113–129
concerned with developmental tasks, 41–59
consumer and industrial arts, 209–225
of the disadvantaged, 80–97
economic and industrial arts, 190–208
of the gifted student, 60–79
of the handicapped, 98–112
industrial arts contribution to elementary, 19–40
as life-long process, 234–236
measures of future personal, 233
of people in future, 226–246
to prepare for change, 227–229
review of literature on future, 230–236
vocational, 130–138
Educational dimensions, and developmental tasks, 50–51
Elementary education—
concerns about, 21–26
contributions of industrial arts to, 19–40
and language arts, 184
impersonalization in, 21, 26, 32
Emotional disturbance, serious, 103
Energy technology, and career education, 127–128
English, learning that improves speaking of, 88, 92
Environmental models, and personality factors, (table) 145
Epilepsy, as physical handicap, 105
Ethical responsibility, in future education, 238
Ethnic groups, as disadvantaged learners, 82
Experiences—
industrial arts in consumer education, 218–219
and language arts, 179
learning related to life, 88, 93
social and language arts, 180
Experimentation, teaches consumerism, 219–220

Failure, as concern in elementary school, 22, 27, 33
Functional academics, for the handicapped, 110
Future, educating people for the, 226–246

Gallup Poll, and elementary school, 25
Gifted child movement, 68
Giftedness, *defined*, 61–62, 63
Gifted student—
characteristics of, 69
education of the, 60–79
identifying, 71–73
and industrial arts course content, 76
learning environment for, 64–67
personalized skills of, 62–64
review of literature on, 68–73

Gifted student (cont.)
and industrial arts learning environment, 74–75
Guidance—
and industrial arts, 139–157
an industrial arts model, 151–156
review of literature on, 141–146
Guidance counseling, and industrial arts, 139–157

Handicapped—
defined, 99
education of the, 98–112
programs for, 106–108
review of literature on, 100–108
Hearing impairments, 102
Hemophilia, as physical handicap, 105
Holland's classification of occupational choice, *illustrated* 148–149
Human factors, in study of industry, 153
Humanistic psychology, and the gifted, 68–71

Illiteracy, 158–161
Impairments, and education of handicapped, 102–106
Independence, activities that establish, 53
Individualized instruction, as concern in elementary school, 23, 28, 34
Individual maturity, and developmental tasks, 42
Industrial arts—
answers concerns in elementary school, 32–37
assists in language arts development, 171–189
and basic assumptions about developmental tasks, 51
and consumer education, 209–225
and economic education, 190–208
and education of people in the future, 226–246
goals for assisting disadvantaged learners, 89
goals for consumer education, 217
and the guidance of youth, 139–157
and improvement of reading, 158–170
limited to career education, 116–117
role of in total educational system, 162
scope of for disadvantaged learners, 93
and the whole student, 247–266
Industrial arts contributions—
to career education, 113–129
to developmental tasks, 41–59
to education of handicapped, 98–112
to education of disadvantaged, 80–97
to education of gifted, 60–79
to elementary education, 19–40
to vocational education, 130–138
Industrial Arts Curriculum Project (IACP), 133–134
Industrial Arts Program Developmental Model, *illustrated*, 57
Industry—
study of and human factors, 153
study of as vocational education, 135–137
Information gathering, learning techniques for future, 236

Instructional resources, for language arts in industrial arts, 185
Intellectual function, in educating whole student, 263
Interpersonal skills, for the handicapped, 110
Irrelevance, as concern in elementary education, 21, 26, 32
Isolation, and disadvantaged learners, 83

Jobs, teaching in elementary school, 25, 31, 37

Laboratory, as learning environment for gifted, 64
Language—
  and developmental activities, 56
  development of, 174–175
  and the disadvantaged learner, 83, 88, 92
  learning methods, 180
  purpose of in school, 173
  to understand industrial arts, 179–180
Language arts—
  and industrial arts, 171–189
  review of literature on, 178–181
  skills outlined, 176–177
Language development, human, 178–179
Language resources, 181
Learner language, development in industrial arts, 182
Learning—
  kinds for disadvantaged learners, 85–89
  as life-long process, 234–236
  organizing knowledge for life-long, 237
Learning by doing, *vs.* verbal mastery, 34
Learning disabilities—
  and PL 94-142 definition, 101
  specific terms, 101
Learning environment—
  for the gifted, 64–67
  industrial arts and the gifted, 74–75
Learning spectrum, *illustrated* 254
Leukemia, as physical handicap, 105
Literacy—
  technological, 121–122
  with technology in future education, 238–239
Literacy gap, and elementary school, 22

Manipulative skills—
  and career education, 124
  and the disadvantaged learner, 94
Maryland Plan, 133–134, 146, 149
Maturation, individual, 42, 44
Maximum involvement design, in educating whole student, 260 *illustrated*, 262
Mental retardation, 100
Methodology—
  of future education, 243–244
  teaching in career education, 119
Motor skills, for the handicapped, 109

Occupational choice, Holland's classifications of, *illustrated* 148–149
Orthopedic impairment, 104

Peer code, activities that develop shift to, 54
Peer interaction, in learning environment for gifted, 65
Personal factor, in educating whole student, 263
Personality factors, and environmental models, (table) 145
Personalized skills—
of the gifted, 62–64
industrial arts development of, 73–74
Philosophies, on career education, 118
Physical motor involvement, in educating whole student, 252
Poliomyelitis, as physical handicap, 105
Power technology, and career education, 127–128
Problem-solving, in future education, 238
Prodigy, child, 68
Production, in industrial arts teaches consumerism, 220
Production technology, and career education, 125
Psychological-emotional matrix, in educating whole student, 256
Psychology, humanistic and giftedness, 68–71
Psychomotor function, in educating whole student, 263

Reading—
case studies of improvement through industrial arts, 163–166
as concern in elementary school, 24, 30, 36
improvement of through industrial arts, 158–170
review of literature on improvement, 161–166
and Scholastic Aptitude Tests (SAT) scores, 159–160
Reasoning activities, 52
Recreational kills, and disadvantaged learners, 94
Relevance—
as concern in elementary education, 21, 26, 32
of industrial arts content for gifted, 66–67, 76
Research, in industrial arts teaches consumerism, 219–220
Retardation, mental, 100
Rheumatic fever, as physical handicap, 105
Routine, as concern in elementary education, 21, 26, 32
Rules and Regulations of the Education for All Handicapped Children Act (PL 94-142), 99

Safety, and disadvantaged learners, 94
Savings, and consumer education, 215
School—
concerns about developmental tasks, 43–46
concerns about elementary, 21–26
impersonal elementary, 21, 26, 32
purpose of language in, 173
Self-concept, and disadvantaged learners, 84, 87, 91
Self-directed learning, in future education, 238
Self-Directed Search (SDS), 144–145, 150
Self-realization, and career education, 122–124
Self-worth, activities that develop, 54–55

Sensory system, in educating the whole student, 249, 263
Sheltered workshops, for the handicapped, 107
Skills—
  academic and disadvantaged learners, 86, 90
  developing essential career, 124
  improving the handicapped, 108–111
  industrial arts and development of personalized, 73–74
  manipulative, and disadvantaged learners, 94
  personalized of the gifted, 62–64
  recreational and disadvantaged learners, 94
Social expectations, and developmental tasks, 42
Society—
  applying technology to solve problems of, 240
  model project, 241–242
  educating for future, 226–246
Speech impairment, 102
Spina bifida, as physical handicap, 105
Student, as a whole in industrial arts, 247–266
Student participation—
  as concern in elementary education, 21, 27, 33, 35
  in whole educational process, 247
Students, organizing in learning environment, 67
Success, and academic self-concept, 33

Teacher—
  characteristics of, 67
  role of as concern in elementary school, 23, 28, 35
  role of in learning environment for gifted, 65–67
Teaching methodology—
  in career education, 119
  language arts in industrial arts, 184–185
Technological awareness, in future education, 237
Technology—
  adjusting education to changing, 238–239
  and career education, 121, 125–128
  and future education, 227–229
  and human language, 175
  and need for reading, 167
  a perspective of education for future, 230
  study of as vocational education, 135–137
Textbooks, as concern in elementary school, 24, 29, 36
"Three R's", in elementary school, 24–25, 30, 36

United States Office of Education (USOE) career clusters, 115
University of Illinois Survival Skills Project, 142

Values, in future education, 227
Verbal mastery, concern of elementary school, 22, 27, 34
Visual handicaps, *defined*, 105
Vocational education—
  and industrial arts, 130–138
  review of literature on, 132–134

Wholeness, in industrial arts education, 246–266
  illustrated, 250

Work—
in career education philosophies, 118
economics diagram, 193
Work relationships, in future
Writing—
as concern in elementary school, 24, 30, 36
in language arts, 177